

# Commercial Vehicle Safety Alliance



## North American Standard Level VI Inspection Program: Ensuring Safe Transportation of Radioactive Material

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[www.cvsa.org](http://www.cvsa.org)

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# Commercial Vehicle Safety Alliance

- Organization of officials responsible for enforcing commercial vehicle safety
- All 50 states, Canada and Mexico
- North American Standard Inspection Procedure for uniform vehicle safety inspection





# CVSA/DOE Cooperative Agreement

- Established 1986
- Goal: Enhanced inspection program for HRCQ radiological material shipments
  - Rigid inspection standards
  - Safeguards
- Implementation: North American Standard Level VI Inspection Program

# Level VI Procedures and Standards

- Higher level than North American Standard
  - Inspection procedures
  - Out-of-service conditions/criteria
- Unique inspection decal
- Inspector training and certification
- As of January 2005 – U.S. DOT requires all HRCQ shipments to pass the Level VI inspection



# Level VI Inspection

- “Defect free” of Level VI inspection items at point of origin
- Level VI criteria applied en route
- Stricter inspection standard, for example
  - Level I: 20% or more brakes out of adjustment is out-of-service
  - Level VI: any brake out of adjustment is out-of-service



# Level VI Inspection Program

- Funded through cooperative agreements with DOE
- Guidance and support from CVSA Level VI Program Committee
- Activities include
  - Training and certification
  - Data reporting
  - Peer reviews
  - Public outreach



# Level VI Training

- Modular curriculum covers
  - Laws and regulations
  - Inspection procedures and techniques
  - Radiation basics
  - Radiation detection
  - Reporting
  - Security
  - Practical exercises with vehicle carrying WIPP TRUPACT or SNF cask



# Level VI Training

- 9 basic classes/year held in various states
- Prerequisites: CVSA Level I and HAZMAT certified
- Industry attends course
- To date 122 classes/2072 attendees
- Currently 768 certified Level VI inspectors in 38 states, Canada, and federal



# Level VI Training

- National instructors are volunteer and certified Level VI inspectors
- Annual review of training curriculum
- Inspector maintains certification with 8 hours of refresher training every 2 years
- Train the trainer: state representatives trained to conduct their own refresher courses to meet certification requirements



# Level VI Inspection Results

- Reports on Level VI inspection results are published regularly. All reports are available on the CVSA website:
  1. Go to CVSA homepage, [www.cvsa.org](http://www.cvsa.org)
  2. Select “Programs” at top of page
  3. Select “North American Standard Level VI Inspection Program” link 
  4. Select “CVSA/WIPP Updates & Reports” link

# Level VI Inspection Results

- Latest report to be published soon reviews data from January 1, 2008 to December 31, 2009
  - Most Level VI inspection data are on WIPP shipments
  - Summary of WIPP shipment inspections (Mar 1999 – Dec 2009):  
14,817 inspections/ 1,128 with violations\*
  - Comparison of Level VI inspection data for WIPP and non-WIPP shipments
  - Comparison of Level VI and FMCSA inspection data

\* preliminary results

# Level VI Inspection Results

<b>CVSA Level VI Inspection Data for WIPP Shipments (January 1, 2009 – December 31, 2009)</b>				
Inspection Activity	Number	Percent	Level I OOS Percent	Level VI OOS Percent
Number of Inspections	2,145			
With no Violations	2,045	95.34%		
With Violations	100	4.66%		
Driver OOS** Rate	0	0.00%	0.00%	0.00%
Vehicle OOS Rate	19	0.88%	0.23%	0.65%

<b>CVSA Level VI Inspection Data for Non-WIPP Shipments (January 1, 2009 – December 31, 2009)</b>				
Inspection Activity	Number	Percent	Level I OOS Percent	Level VI OOS Percent
Number of Inspections	227			
With no Violations	202	88.99%		
With Violations	25	11.01%		
Driver OOS Rate	0	0.00%	0.00%	0.00%
Vehicle OOS Rate	2	0.88%	0.88%	0.00%

<b>FMCSA Roadside Inspection Data for the Year 2009*</b>			<b>FMCSA HAZMAT Inspection Data for the Year 2009*</b>		
Inspection Activity	Number	Percent	Inspection Activity	Number	Percent
Number of Inspections	3,558,909		Number of Inspections	223,012	
With no Violations	1,198,692	33.68%	With no Violations	N/A	N/A
With Violations	2,360,217	66.32%	With Violations	N/A	N/A
Driver OOS** Rate	192,006 †	5.55%	OOS Rate	10,212	4.58%
Vehicle OOS Rate	502,867 †	21.24%			

† The number of inspections is a combination of some Driver, some Vehicle and some combination of both. The OOS Rates are for only those types of inspections.

\*Data Source: FMCSA Motor Carrier Management Information System (MCMIS) August 27, 2010 data snapshot

<http://ai.fmcsa.dot.gov/SafetyProgram/RoadsideInspections.aspx>

\*\*OOS = Out-of-Service

# Level VI Program Peer Reviews

- Purpose is to identify and share best practices
- Peer Review Activities
  - Teams selected from CVSA Level VI Program Committee, Council of State Governments Northeast and Midwest, SSEB, WGA, DOE, and WIPP carriers
  - 7 states visited: South Carolina, Tennessee, Illinois, Colorado, New Mexico, Washington, Michigan
  - Report published in January 2007 (available on CVSA's website)
  - Two additional visits scheduled for 2011



# Level VI Program Outreach

- Goals
  - Educate public on successful Level VI Program
  - Provide information on shipments of transuranic waste and HRCQ
- Tools
  - Display unit
  - Publications
  - Presentations
- Since 2005 over 44 events (conferences, workshops, meetings) attended



# Conclusions

- Certified Level VI inspectors capable of inspection of HRCQ radioactive material and transuranic waste
- Level VI Outreach Program provides information on transportation of radioactive materials to states and public
- Level VI Inspection Program works with states, DOE, and dedicated motor carriers for safe transportation of radioactive materials



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